

Mr. Robert Williamson
Plant Manager
Resco Products, Inc.
5501 Kennedy Avenue
Hammond, Indiana 46323

Re: Minor Source Modification No: 089-14801-00222

Dear Mr. Williamson:

Resco Products, Inc. applied for a Part 70 operating permit on December 13, 1996 for the manufacture of magnesite-carbon and alumina-carbon resin-bonded refractory shapes. An application to modify the source was received on June 27, 2001. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

Montco Line: Dry batching, mixing, and packing of castable refractory consisting of:

- (a) One (1) Pre-Batching Area with a bulk bag feed station and a manual bag break station,
- (b) One (1) Montco Mixer, with elevated tote station, and
- (c) One (1) Sacking Station.

The Montco Line has a maximum capacity of 10 tons per hour, uses a jet pulse cartridge dust collector (D-30) for particulate control, and exhausts to stack S-30.

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5 (l)(3). The source may begin operation upon issuance of the minor source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact this Department at (219) 853-6306.

Sincerely,

Ronald Holder, Engineer
Hammond Department of Environmental Management
Air Pollution Control Division

cc: Cheryl Newton, Chief, Program Evaluation Section, U.S.E.P.A., Region V
Mindy Hahn, Permits Administration, IDEM-OAQ

RH

ENCLOSURES

PART 70 MINOR SOURCE MODIFICATION

**Indiana Department of Environmental Management
Office of Air Quality**

and

**Hammond Department of Environmental Management
Air Pollution Control Division**

**RESCO Products, Inc.
5501 Kennedy Avenue
Hammond, Indiana 46323**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 089-14801-00222	
Issued by:	Issuance Date: September xx, 2001
Ronald L. Novak, Director Hammond Department of Environmental Management	

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Hammond Department of Environmental Management (HDEM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary source, manufacturer of Magnesite–Carbon and Alumina–Carbon resin-bonded refractory shapes.

Responsible Official: John S. Miller, Vice President - Technology
Source Address: 5501 Kennedy Avenue, Hammond, Indiana 46323
Mailing Address: P. O. Box 2128, Hammond, Indiana 46323
SIC Code: 3297 – Nonclay Refractories
County Location: Lake County
Source Location Status: Attainment for Lead, CO and NO₂, and
Non-Attainment for all other criteria pollutants including ozone
Source Status: Part 70 Permit Program
Minor Source, under Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

Montco Line: Dry batching, mixing, and packing of castable refractory consisting of:
(a) One (1) Pre-Batching Area with a bulk bag feed station and a manual bag break station,
(b) One (1) Montco Mixer, with elevated tote station, and
(c) One (1) Sacking Station.
The Montco Line has a maximum capacity of 10 tons per hour, uses a jet pulse cartridge dust collector (D-30) for particulate control, and exhausts to stack S-30.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This modification does not include any insignificant activities, as defined in 326 IAC 2-7-1(21).

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and HDEM. IDEM, OAQ and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is are in operation.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination

of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ and HDEM upon request and shall be subject to review and approval by IDEM, OAQ and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

and HDEM;

Telephone Number: (219) 853-6306
Facsimile Number: (219) 853-6343

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and
Hammond Department of Environmental Management
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and HDEM on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Montco Line: Dry batching, mixing, and packing of castable refractory consisting of:

- (a) One (1) Pre-Batching Area with a bulk bag feed station and a manual bag break station,
- (b) One (1) Montco Mixer, with elevated tote station, and
- (c) One (1) Sacking Station.

The Montco Line has a maximum capacity of 10 tons per hour, uses a jet pulse cartridge dust collector (D-30) for particulate control, and exhausts to stack S-30.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Non-Attainment Area Particulate Limitations [326 IAC 6-1-2(a)] [326 IAC 6-1-2(h)] [326 IAC 2-2]

Pursuant to 326 IAC 6-1-2(a) and (h), the PM and PM10 emissions from the Montco Line exhaust stack S-30 shall not exceed the pounds per hour emission rates shown as follows:

Emission Unit ID and Description	PM Emission Limit 326 IAC 6-1-2(a)	PM10 Emission Limit 326 IAC 6-1-2(h)
Montco Line – Dry batching, mixing, and packing line Jet Pulse Cartridge Dust Collector (D-30) Stack (S-30)	0.03 gr/dscf equivalent to 1.8 lbs/hr	0.022 gr/dscf equivalent to 1.32 lbs/hr

Lake County is classified as moderate non-attainment for PM10, therefore 326 IAC 2-2, Prevention of Significant Deterioration (PSD) requirements do not apply to this modification.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

D.6.4 Particulate Matter (PM) and Particulate Matter less than 10 microns (PM10)

In order to comply with Condition D.6.1, the particulate control device (D-30) shall be in operation and control emissions from the Montco Line at all times when the emission units are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Visible Emissions Notations

- (a) Visible emission notations of the Montco Line stack exhaust (S-30) shall be performed once per shift during normal daylight operations when the line is in operation. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.

D.6.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector (D-30) used in conjunction with the Montco Line at least once per shift when the Montco Line is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM-OAQ and HDEM, and shall be calibrated at least once every six (6) months.

D.6.7 Baghouse / Dust Collector Inspections

An inspection shall be performed each calendar quarter of all bags or cartridges controlling the operations that vent to the atmosphere. A baghouse / dust collector inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags or cartridges shall be replaced.

D.6.8 Broken or Failed Bag / Cartridge Detection

In the event that bag or cartridge failure has been observed:

- (a) For multi-compartment units, the affected compartments shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B – Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of

discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) For single compartment baghouses or dust collectors, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

- (a) To document compliance with Condition D.6.5, the Permittee shall maintain records of daily visible emission notations for the Montco Line stack S-30.
- (b) To document compliance with Condition D.6.6, the Permittee shall maintain the following:

Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
- (c) To document compliance with Condition D.6.7, the Permittee shall maintain records of the results of the inspections required under Condition D.6.7.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Resco Products, Inc.
Source Address: 5501 Kennedy Avenue, Hammond, Indiana 46323
Mailing Address: P. O. Box 2128, Hammond, Indiana 46323
Part 70 Permit No.: T089-7791-00222

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- ☐ Annual Compliance Certification Letter
- ☐ Test Result (specify) _____
- ☐ Report (specify) _____
- ☐ Notification (specify) _____
- ☐ Affidavit (specify) _____
- ☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

**Indiana Department of Environmental Management
Office of Air Quality**

and

**Hammond Department of Environmental Management
Air Pollution Control Division**

**Technical Support Document (TSD) for a Minor Source Modification
to a Part 70 Operating Permit**

Source Background and Description

Source Name:	Resco Products, Inc.
Source Location:	5501 Kennedy Avenue, Hammond
County:	Lake
SIC Code:	3297 – Nonclay Refractories
Operation Permit No.:	T089-7791-00222
Operation Permit Issuance Date:	(not issued yet)
Minor Source Modification	089-14801-00222
Permit Reviewer:	Ronald Holder, HDEM

The Hammond Department of Environmental Management (HDEM) has reviewed a modification application from Resco Products, Inc. relating to the construction and operation of one:

Montco Line: Dry batching, mixing, and packing of castable refractory consisting of:

- (a) One (1) Pre-Batching Area with a bulk bag feed station and a manual bag break station,
- (b) One (1) Montco Mixer, with elevated tote station, and
- (c) One (1) Sacking Station.

The Montco Line has a maximum capacity of 10 tons per hour, uses a jet pulse cartridge dust collector (D-30) for particulate control, and exhausts to stack S-30.

History

On June 27, 2001, Resco Products, Inc. submitted an application to the HDEM requesting to add a dry product mixing and packing operation to their existing plant. Resco, formerly Harbison-Walker Refractories, submitted their Part 70 application on December 13, 1996. The Part 70 permit has not been issued as of the date of this review.

Existing Approvals

The source applied for a Part 70 Operating Permit on December 13, 1996. The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 00004, issued on January 3, 1996,
- (b) CP 327, issued on December 6, 1991,
- (c) CP 348 thru 351, issued on April 10, 1992,
- (d) CP 365 and 366, issued on October 20, 1992,
- (e) CP 378, issued on July 8, 1993,
- (f) CP 384 and 385, issued on August 9, 1993,
- (g) CP 0402 thru 0409, issued on December 14, 1993,
- (h) CP 0430, issued on June 8, 1994,
- (i) CP 450 thru 453, issued on April 3, 1996,
- (j) CP 00527, issued on October 16, 1996.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S-30	Montco Line	35	1	6980	Ambient

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 27, 2001. Additional information was received on July 23, 2001.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (one (1) page).

Potential To Emit of the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	13.14
PM-10	7.45
SO ₂	0
VOC	0
CO	0
NO _x	0

HAP's	Potential To Emit (tons/year)
Single	0
Combination	0

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(d)(4)(A) – Less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either particulate matter (PM) or particulate matter less than ten (10) microns (PM10).

Limited Potential to Emit of the Modification after Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Montco Line	0.26	0.15	0	0	0	0	0
Total Emissions	0.26	0.15	0	0	0	0	0
PSD and EO Significant Levels	25	15	-	-	-	-	-

See calculations Appendix A

This modification to an existing major stationary source is not major because the emissions increase is less than the Prevention of Significant Deterioration (PSD) or Emission Offset (EO) significant levels. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

This source is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and there are no applicable New Source Performance Standards that were in effect on August 7, 1980, therefore, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

This source is located in Lake County. 40 CFR 81.315 – (Indiana) – 7/1/99

Pollutant	Status
PM-10	moderate non-attainment
SO ₂	primary non-attainment
NO ₂	Attainment/Unclassifiable
Ozone	severe non-attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe non-attainment for ozone.
- (b) Lake County has been classified as moderate non-attainment for particulates less than ten (10) microns in diameter (PM₁₀). Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The facility is not subject to 40 CFR Part 60.67, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants because the facility is not involved in the processing of nonmetallic minerals as defined in 40 CFR Part 60.671, Definitions.

- (c) The facility is not subject to 40 CFR Part 60.38, Subpart LL, Standards of Performance for Metallic Mineral Processing Plants because the facility is not involved in the processing of metallic minerals as defined in 40 CFR Part 60.381, Definitions.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) in February 1991. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on October 2, 1997. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NOx. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

The source is in compliance with the required emission statement submittals.

326 IAC 5-1-2 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

Pursuant to this rule, the Permittee shall be in violation if the opacity of fugitive particulate emissions exceeds ten percent (10%).

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

Pursuant to this rule, the Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

State Rule Applicability - Individual Facilities

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(a), the PM emissions from the Montco Line shall be limited to 0.03 grains per dry standard cubic foot, equivalent to 1.80 lbs/hr.

326 IAC 6-1-2(h) (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2(h), the PM₁₀ emissions from the Montco Line shall be limited to 0.022 grains per dry standard cubic foot, equivalent to 1.32 lbs/hr.

Testing Requirements

Particulate emissions after control from this modification, based on the emission factors used in the calculations (see Appendix A), are less than 5% of the allowable limit and the potential emissions from this modification are less than 1% of the total source potential. Therefore, stack testing should not be necessary at this time. However, the commissioner may require stack testing at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Montco Line has applicable compliance monitoring conditions as specified below:

- (a) Visible emissions notations of the Montco Line Dust Collector exhaust stack S-30 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across the dust collector (D-30) controlling the Montco Line, at least once per shift when the Montco Line is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the dust collector (D-30) shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above-mentioned range for any one reading.

These monitoring conditions are necessary because the dust collector (D-30) for the Montco Line must operate properly to ensure compliance with 326 IAC 6-1-2(a) and 326 IAC 6-1-2(h) (Non-Attainment Area Particulate Limitations)

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this modification.

Conclusion

The operation of this Montco Line shall be subject to the conditions of the attached proposed **Part 70 Minor Source Modification Permit No. 089-14801-00222**.

RESCO Products, Inc.
5501 Kennedy Avenue
Hammond, Indiana 46323

PLANT ID NO: 089-00222

INSP DATE: 6/2/01

CALC DATE: 8/17/01

CALCULATIONS BY: Ronald Holder

YEAR OF DATA: review

NO. OF POINTS: 1

NOTES

EF: EMISSION FACTOR

MDR: MAXIMUM DESIGN RATE

Ts: STACK DISCHARGE TEMPERATURE

CE: CONTROL EFFICIENCY

MDC: MAXIMUM DESIGN CAPACITY

UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

POINT ID: Montco Line - Castable Refractory
Stack S-30 Dry Line Batching, Mixing, and Packing

MDR (T/hr): 10
YEARLY PROD (T/yr): N/A

STACK ID (DIAM:HEIGHT): (1': 35')
FLOWRATE (ACFM): 6980
Ts(°F): 70

CNTRL DEV: Pulse-Jet Cartridge
Dust Collector (D-30)

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-05-011-07			POTENTIAL EMISSIONS						ALLOWABLE	
POLLUTANT	EF(LB/T)	CE (%)	BEFORE CONTROLS			AFTER CONTROL			(lbs/hr)	(TPY)
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)		
PM	0.30	0.98	3.000	72.000	13.140	0.060	0.263	0.0010	1.795	7.861
PM10	0.17	0.98	1.700	40.800	7.446	0.034	0.149	0.0006	1.316	5.765
SOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0.000	0.000
NOx	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0.000	0.000
VOC	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0.000	0.000
CO	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0.000	0.000
LEAD	0	0	0.000	0.000	0.000	0.000	0.000	N/A	0.000	0.000

PM - 326 IAC 6-1-2 (a), 0.03 gr/dscf

PM10 - 326 IAC 6-1-2 (h), 0.022 gr/dscf

Minor Source Modification to Part 70 source required per 326 IAC 2-7-10.5 (d)(4);
less than twenty-five (25) TPY and equal to or greater than five (5) TPY of
particulate matter (PM) or particulate matter less than ten (10) microns (PM₁₀).

PM and PM10 emissions after control are less than 5%
of the allowable emissions and the potential emissions of
the modification are less than 1% of the total potential for
the source. Stack testing should not be necessary for this item.

RESCO Title V Permit - 089-7791-00222 - not issued as of the date of this review.

Emission Factors from FIRE version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants
3-05-011 - Concrete Batching

	PM	PM10
3-05-011-07 Cement Unloading: Storage Bins	0.24	0.14
3-05-011-08 Weigh Hopper Loading of Cement/Sand/Aggregate	0.02	0.01
3-05-011-09 Mixer Loading of Cement /Sand /Aggregate	0.04	0.02
	0.30	0.17